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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,498	10/01/2003	Adam L. Cohen	P-US080-A-MF	8256
32107	7590	11/16/2005	EXAMINER	
MICROFABRICA INC. ATT: DENNIS R. SMALLEY 7911 HASKELL AVENUE VAN NUYS, CA 91406			VAN, LUAN V	
			ART UNIT	PAPER NUMBER
			1753	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,498

Applicant(s)

COHEN ET AL.

Examiner

Luan V. Van

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show features 206, 224(1,1)-224(4,3), 222(1,1)-222(4,3), 308, 312(1)-312(6), 650, and 652 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figure 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

page 29, line 1, "60/429484" should be changed to --60/429483--

page 37, paragraph 139, "Figure 7(c)" should be changed to --Figure 6(c)--

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 11-16, 22-24, 30-31, 38, 42-43, 48-49 and 52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10677546.

Regarding claims 11-16, 22-24, 30-31, 38, 42-43, 48-49 and 52, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, wherein the cells of the mask comprise independently controllable electrodes, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into contact such that electrochemical process

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pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; and (4) selectively depositing a desired material onto the substrate.

In addition, Application '546 claims the steps of depositing structural materials and sacrificial materials as two different materials (claim 5); planarizing the surface of the deposited material (claim 22); using a dielectric conformable mask (claim 3); and moving the mask to a different location by an offset (claim 7).

The difference between the reference to Application '546 and the instant claims is that the reference does not explicitly teach providing a passage in proximity to the cell electrode by bringing the mask and the substrate into proximate positioning without achieving contact sealing (claims 11 and 48).

Application '546 claims using a computer-controlled stage for bringing a mask and the substrate into contact. Since the substrate and the mask are inherently nonplanar, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recognized that a gap would be present between the mask and the substrate. It would have been further obvious to one having ordinary skill in the art to provide a gap between the mask and the substrate, because it would allow

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fresh electrolyte to enter the process pockets in order to replenish the metal ions in the electrolytic solution.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-10, 17-21, 29-30, 44-45 and 50-51 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10677546 in view of Cohen '630.

Regarding claims 1, 3-10, 17-21, 29-30, 44-45 and 50-51, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other

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cells by a material, wherein the cells of the mask comprise independently controllable electrodes, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; and (4) selectively depositing a desired material onto the substrate.

In addition, Application '546 claims the steps of depositing structural materials and sacrificial materials as two different materials (claim 5); planarizing the surface of the deposited material (claim 22); using a dielectric conformable mask (claim 3); and moving the mask to a different location by an offset (claim 7).

The difference between the reference to Application '546 and the instant claims is that the reference does not explicitly teach etching or selectively etching of material.

Cohen '630 teach a method for forming a 3-D structure comprising the steps of etching the surface of a porous medium to generate a relief pattern (column 12 lines 55-67). In addition, Cohen '630 teach that the anode can be redressed periodically by reversing the polarity of the anode and plating metal back onto the anode through the

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negative features of the mask (column 7 lines 48-57). By reversing the polarity of the anode, the mask would inherently perform etching on the substrate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Application '519 by etching the substrate as taught by Cohen '630, because it would generate a pattern such as voids for subsequent deposition to form a 3-D structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-31, 36, 38 and 40-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-48 of copending Application No. 10434519 in view of McFarland et al.

Regarding claims 1-31, 36, 38 and 40-52, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least

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one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into proximate positioning or contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; (4) selectively etching material from the substrate or previously deposited material to form at least one void, comprising applying a desired electrical activation to at least one selected cell electrode and to the substrate; and (5) depositing a selected material into at least a portion of the at least one void.

In addition, Application '519 claims the steps of depositing structural materials and sacrificial materials (claim 25 and 28); planarizing the surface of the deposited material (claim 15 and 28); using a conformable contact mask (claim 47). The mask of Application '519 is a multi-cell mask, since pockets or cells are created by the masking material on the mask.

The difference between the reference to Application '519 and the instant claims is that the reference does not explicitly teach the cells of the mask comprise independently controllable electrodes.

McFarland et al. teach a method for electrochemically depositing materials on the substrate using an array of electrodes, wherein the electric potential of each electrode can be independently varied (column 3 lines 36-65). McFarland et al. teach that the method provides a potential masking method which generates spatially varying electric, magnetic, and/or chemical potentials across a substrate (column 3 lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Application '519 by using a mask having independently controllable electrodes as taught by McFarland et al., because having independently controllable electrodes allows the electric potential to be varied, and thus allows the thickness to be controlled at different locations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of copending Application No. 10271574 in view of McFarland et al.

Regarding claims 1-52, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into proximate positioning or contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; (4) selectively etching material from the substrate or previously deposited material to form at least one void, comprising applying a desired electrical activation to at least one selected cell electrode and to the substrate; and (5) depositing a selected material into at least a portion of the at least one void.

In addition, Application '574 claims the steps of depositing structural materials and sacrificial materials (claim 21); planarizing the surface of the deposited material (claim 22); using a conformable contact mask (claim 1); varying the temperature of the conformable mask (claim 4), which can inherently create bubbles to inhibit etching or deposition; and detecting a first electrical parameter whose value depends on the location of a deposit within the opening (claim 28-33). The mask of Application '574 is a multi-cell mask, since pockets or cells are created by the masking material on the mask.

The difference between the reference to Application '574 and the instant claims is that the reference does not explicitly teach the cells of the mask comprise independently controllable electrodes.

McFarland et al. teach a method for electrochemically depositing materials on the substrate using an array of electrodes, wherein the electric potential of each electrode can be independently varied (column 3 lines 36-65). McFarland et al. teach that the method provides a potential masking method which generates spatially varying electric, magnetic, and/or chemical potentials across a substrate (column 3 lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Application '574 by using a mask having independently controllable electrodes as taught by McFarland et al., because

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having independently controllable electrodes allows the electric potential to be varied, and thus allows the thickness to be controlled at different locations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10724515 in view of McFarland et al.

Regarding claims 1-52, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming

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process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into proximate positioning or contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; (4) selectively etching material from the substrate or previously deposited material to form at least one void, comprising applying a desired electrical activation to at least one selected cell electrode and to the substrate; and (5) depositing a selected material into at least a portion of the at least one void.

In addition, Application '515 claims the steps of planarizing the surface of the deposited material (claim 9); using a contact mask (claim 1). The mask of Application '574 is a multi-cell mask, since pockets or cells are created by the masking material on the mask.

The difference between the reference to Application '515 and the instant claims is that the reference does not explicitly teach the cells of the mask comprise independently controllable electrodes.

McFarland et al. teach a method for electrochemically depositing materials on the substrate using an array of electrodes, wherein the electric potential of each electrode can be independently varied (column 3 lines 36-65). McFarland et al. teach that the

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method provides a potential masking method which generates spatially varying electric, magnetic, and/or chemical potentials across a substrate (column 3 lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Application '515 by using a mask having independently controllable electrodes as taught by McFarland et al., because having independently controllable electrodes allows the electric potential to be varied, and thus allows the thickness to be controlled at different locations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-41 of copending Application No. 10309521 in view of McFarland et al.

Regarding claims 1-52, the copending application claims the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials; (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least

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one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred; (2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into proximate positioning or contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets; (4) selectively etching material from the substrate or previously deposited material to form at least one void, comprising applying a desired electrical activation to at least one selected cell electrode and to the substrate; and (5) depositing a selected material into at least a portion of the at least one void.

In addition, Application '521 claims the steps of depositing structural materials and sacrificial materials (claim 19); planarizing the surface of the deposited material (claim 2); using a conformable contact mask (claim 1). The mask of Application '521 is a multi-cell mask, since pockets or cells are created by the masking material on the mask.

The difference between the reference to Application '521 and the instant claims is that the reference does not explicitly teach the cells of the mask comprise independently controllable electrodes.

McFarland et al. teach a method for electrochemically depositing materials on the substrate using an array of electrodes, wherein the electric potential of each electrode can be independently varied (column 3 lines 36-65). McFarland et al. teach that the method provides a potential masking method which generates spatially varying electric, magnetic, and/or chemical potentials across a substrate (column 3 lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Application '521 by using a mask having independently controllable electrodes as taught by McFarland et al., because having independently controllable electrodes allows the electric potential to be varied, and thus allows the thickness to be controlled at different locations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen '630 in view of McFarland et al.

Regarding claims 1-52, Cohen '630 teach the following method:

A method for forming a multilayer three-dimensional structure comprising: (a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials (figure 11); (b) repeating the forming operation of "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers; wherein the forming of at least one layer, comprises: (1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred (figure 11); (2) supplying a multi-cell mask (14b, figure 11g), wherein

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each cell is separated from other cells by a material, and wherein a pattern of dielectric material extends beyond the cell electrodes for proximate or contact positioning relative to the substrate and for forming process pockets when such proximate or contact positioning is achieved; (3) bringing the multi-cell mask and the substrate into proximate positioning or contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is located within the electrochemical process pockets (figure 11); (4) selectively etching material from the substrate (figure 9) or previously deposited material to form at least one void, comprising applying a desired electrical activation to at least one selected cell electrode and to the substrate; and (5) depositing a selected material (figure 12) into at least a portion of the at least one void.

In addition, Cohen '630 teach the steps of depositing structural materials and sacrificial materials (figure 5); planarizing the surface of the deposited material (figure 5); and using a conformable contact mask (figure 5).

The difference between the reference to Cohen '630 and the instant claims is that the reference does not explicitly teach the cells of the mask comprise independently controllable electrodes.

McFarland et al. teach a method for electrochemically depositing materials on the substrate using an array of electrodes, wherein the electric potential of each electrode

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can be independently varied (column 3 lines 36-65). McFarland et al. teach that the method provides a potential masking method which generates spatially varying electric, magnetic, and/or chemical potentials across a substrate (column 3 lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Cohen '630 by using a mask having independently controllable electrodes as taught by McFarland et al., because having independently controllable electrodes allows the electric potential to be varied, and thus allows the thickness to be controlled at different locations.

Conclusion

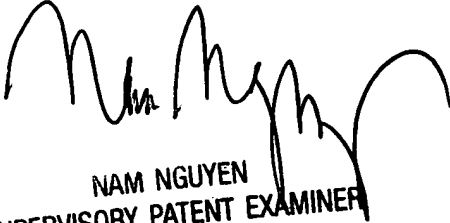
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan V. Van whose telephone number is 571-272-8521. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LWV
11/1/05



NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700